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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,816	12/22/1999	GLEN J. BERTINI	UTLX114698	7989

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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 05/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/471,816

Applicant(s)

BERTINI ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 16 April 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2831

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c). The residence of inventor Stagi has been altered without an initial.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of the second conduit (or the housing) encasing the first conduit (or the sleeve) and also including a hollow interior to permit the passage of a fluid therethrough as claimed in claims 13, 24, 34 and 35 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to

Art Unit: 2831

make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 13, 24, 34 and 35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not provide a detailed description to support for the second conduit (or the housing) encasing the first conduit (or the sleeve) to seal the first conduit (or the sleeve) within the second conduit (or the housing) and also including a hollow interior to permit the passage of a fluid therethrough. In other words, it is unclear to how can the interior of the second conduit be used to encase the first sleeve and also to permit the passage of a fluid therethrough?

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 13, 21, 24, 32, 34 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13, line 2, "the second conduit" lacks antecedent basis.

Claim 13, line 4, "a fluid" is unclear to whether this is the same fluid recited earlier in claim 1.

Art Unit: 2831

Claim 21, line 3, change “a second” to --another--.

Claim 24, line 2, “the housing” lacks antecedent basis.

Claim 24, line 4, “a fluid” is unclear to whether this is the same fluid recited earlier in claim 14.

Claim 32, line 3, change “a second” to --another--.

Claim 34, line 4, change “either” to --one of the-- and change “end” to --ends--.

Claim 34, line 12, change “either open end” to --the other of the open ends--.

Claim 34, line 13, “one open end” is unclear to how this relates to “open ends” recited earlier in the claim.

Claim 34, line 15, “a fluid” is unclear to whether this is the same fluid recited earlier in the claim.

Claim 35, line 14, “one open end” is unclear to how this relates to “open ends” recited earlier in the claim.

Claim 35, line 16, “a fluid” is unclear to whether this is the same fluid recited earlier in the claim.

No rejection based on prior art is given at this point for claims 13, 24, 34 and 35. MPEP 2173.06 states: *“where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a claim, it would not be proper to reject such a claim on the basis of prior art. As stated in In re Steele, 305 F. 2d 859, 134 USPQ 292 (CCPA 1962), a*

Art Unit: 2831

rejection under 35 U.S.C. 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims."

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, 10, 12, 14, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert (4,943,685) in view of Bertini (5,200,234).

Reynaert discloses a connector for a first information transmitting cable which has an outer surface, an interior end, an exterior end, and a central conductor portion, the connector

Art Unit: 2831

comprising a first conduit having open ends, at least one open end of the first conduit adapted to receive the interior end of the first cable, the first conduit including a hollow interior to permit the passage of a fluid (34), wherein the first conduit forming a fluid tight seal between the first conduit and the first cable.

Reynaert does not disclose the fluid having a viscosity of less than or equal to 100 centipoise, nor the fluid tight seal able to hold at least 30 psig of internal pressure.

Bertini discloses a fluid being used to fill the space between a cable and a conduit, the fluid having a viscosity of less than 100 centipoise. It would have been obvious to one skilled in the art to use the fluid taught by Bertini for the fluid of Reynaert since the fluid of Bertini has low viscosity to allow the filling to take place at ambient temperatures, including winter conditions as taught by Bertini (col. 4, lines 18-25). Noted that the modified connector of Reynaert can hold at least 30 psig of internal pressure since it comprises structure and material as claimed (re claims 1 and 14).

The modified connector of Reynaert also discloses an injection port to provide fluid to communicate with the hollow interior of the conduit (re claim 2), an insulation sleeve (22) cover the central conductor, the conduit being located on the insulation sleeve (re claims 10 and 21), a second cable being received at the other open end of the first conduit (re claims 12 and 23).

9. Claims 3, 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Bertini as applied to claims 1 and 14 above, and further in view of Tepel.

Art Unit: 2831

Claims 3, 4 and 15 in addition to the limitations of claims 1 and 14 recite the injection port being an internally threaded opening and an internally threaded plug sealingly received within the port. Tepel discloses a connector for cable comprising an injection port (46) which is an internally threaded opening, and an internally threaded plug (47) is sealingly received within the port. It would have been obvious to one skilled in the art to apply the teaching of Tepel into the Reynaert connector by modifying the port (36) to be an internally threaded opening and the plug (40) to be an internally threaded plug to improve the tighten of the plug within the port.

10. Claims 5-8 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Bertini as applied to claims 1 and 14 above, and further in view of Smith (3,823,254).

Claims 5-7 and 16-18 in addition to the limitations of claims 2 and 14 recite a tube which is sealingly received within the port and has an angularly disposed fin integrally formed with the tube. Smith discloses a connector comprising a tube (20) which is sealingly received within a port (18) and has an angularly disposed fin (not numbered, fig. 3) integrally formed with the tube. It would have been obvious to one skilled in the art to use the tube as taught by Smith for the plug (40) of Reynaert to improve the sealing at the port since the tube has the fin, it would not be withdrawn from the port easily.

Claims 8 and 19 additionally recite that there are a plurality of fins integrally formed with the tube. It would have been obvious to one skilled in the art to provide a plurality of fins on the

Art Unit: 2831

modified tube of Reynaert to improve the tighten of the tube within the port since it has been held that merely duplicating the essential working part of a device involves only routine skill in the art. *St. Regis Pater Co. v. Bemis Co.*, 193 USPQ 8.

11. Claims 9, 11, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Bertini as applied to claims 1 and 14 above, and further in view of Dery et al. (5,006,286).

Claims 9, 11, 20 and 22 additionally recite the conduit (sleeve) being comprised of a heat shrinkable material. Dery et al. discloses a connector comprising a conduit (sleeve 102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable material as taught by Dery et al. for the conduit (sleeve) of Reynaert such that a tight seal between the conduit (sleeve) and the cables is provided without using hose clamps because the heat shrinkable sleeve is heat shrunk onto the cables.

12. Claims 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock et al. (4,503,283) in view of Bryant et al. (4,621,168) and Bertini.

Hancock et al. discloses a connector for passing repair chemicals through at least a first electrical cable which has an outer surface, an interior end, an exterior end, and a central conductor, the connector comprising a cable adapter (50) attachable to the outer surface of the cable, the cable adapter being located on the outer surface at a position remote from the interior

Art Unit: 2831

end of the cable to leave exposed a portion of the outer surface of the cable adjacent the interior end, a sleeve (81) having a first end, a second end, and a hollow interior, the first end adapted to fit over the exposed portion of the outer surface of the cable adjacent the interior end thereof, the second end of the sleeve adapted to fit over a conductor contact. Hancock et al. also discloses an insulation sleeve covering the central conductor.

Hancock et al. does not disclose the sleeve comprising a fluid injection port, a conductor contact attached to the central conductor, nor the viscosity of the fluid.

Bryant et al. discloses a connector comprising a sleeve having an injection port (9). It would have been obvious to one skilled in the art to provide the sleeve of Hancock et al. with an injection port as taught by Bryant et al. to ease the process of pouring the fluid into the hollow interior of the sleeve.

Although not specifically disclosed by Hancock et al., it would have been obvious to one skilled in the art to use a conductor contact to attach to the central conductor of Hancock et al. to provide electrical connection with the central conductor of another cable.

Bertini discloses a fluid being used to fill the space between a cable and a conduit, the fluid having a viscosity of less than 100 centipoise. It would have been obvious to one skilled in the art to use the fluid taught by Bertini for the fluid of Hancock et al. since the fluid of Bertini has low viscosity to allow the filling to take place at ambient temperatures, including winter conditions as taught by Bertini (col. 4, lines 18-25). Noted that the modified connector of Hancock et al. can hold at least 30 psig of internal pressure since it comprises structure and material as claimed.

Art Unit: 2831

13. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock et al. in view of Bryant et al. and Bertini as applied to claim 25 above, and further in view of Tepel.

Claim 26 additionally recites the injection port being an internally threaded opening and an internally threaded plug sealingly received within the port. Tepel discloses a connector for cable comprising an injection port (46) which is an internally threaded opening, and an internally threaded plug (47) is sealingly received within the port. It would have been obvious to one skilled in the art to apply the teaching of Tepel into the modified connector of Hancock et al., by modifying the port (36) to be an internally threaded opening and the plug (40) to be an internally threaded plug to improve the tighten of the plug within the port.

14. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock et al. in view of Bryant et al. and Bertini as applied to claim 25 above, and further in view of Smith.

Smith discloses a connector comprising a tube (20) which is sealingly received within a port (18) and has an angularly disposed fin (not numbered, fig. 3) integrally formed with the tube. It would have been obvious to one skilled in the art to use the tube as taught by Smith for the modified plug of Hancock et al. to improve the sealing at the port since the tube has the fin, it would not be withdrawn from the port easily.

It would also have been obvious to one skilled in the art to provide a plurality of fins on the modified tube of Hancock et al. to improve the tighten of the tube within the port since it has

Art Unit: 2831

been held that merely duplicating the essential working part of a device involves only routine skill in the art. *St. Regis Pater Co. v. Bemis Co.*, 193 USPQ 8.

15. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock et al. in view of Bryant et al. and Bertini as applied to claim 25 above, and further in view of Dery et al.

Dery et al. discloses a connector comprising a conduit (sleeve 102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable material as taught by Dery et al. for the conduit (sleeve) of Hancock et al. such that a tight seal between the conduit (sleeve) and the cables is provided without using hose clamps because the heat shrinkable sleeve is heat shrunk onto the cables.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2831

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is (703) 308-0693.

A handwritten signature in black ink, appearing to read 'Chau N. Nguyen', with a long horizontal flourish extending to the right.

Chau N. Nguyen

Primary Examiner

CN

May 24, 2002